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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,429	11/28/2003	Ming-Hua Li	LIE 178	7367

7590 12/03/2004

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EXAMINER

SHAKERI, HADI

ART UNIT	PAPER NUMBER
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3723

DATE MAILED: 12/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/722,429

Applicant(s)

LI ET AL.

Examiner

Hadi Shakeri

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 9-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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DETAILED ACTION***Claim Objections***

1. Claims 9-11 are objected to because of the following informalities: "teeth disposed radially disposed" in line 7, claim 9 is objected to, "disposed", first occurrence, should be deleted. Appropriate correction is required.

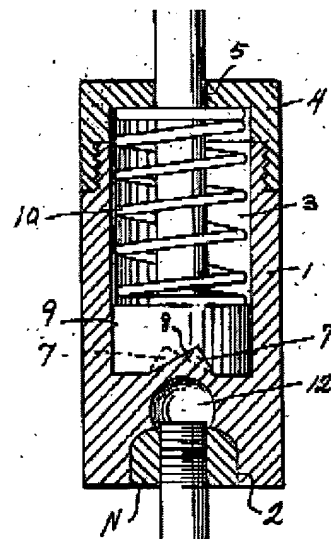
Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Le Chot (1,328,087) in view of Sedgley (1,521,331).

Le Chot meets all of the limitations of claim 9, i.e., a constant force socket comprising a coupling hole (2) having an open end and a closed end; an inner hole (3) having an open end and a closed end; wherein the closed end of the coupling hole abuts the closed end of the inner hole, a threaded region located proximate said open end of the inner hole, a first set of teeth (7) (two disclosed, solid and dotted lines) disposed in an interior of said inner hole proximate said closed end of said inner hole, a ratchet wheel having a first end (9) and a second end (6) and having a region of relatively greater diameter terminating in said first end and a region of relatively smaller diameter terminating in said second end; wherein the ratchet wheel is mounted in the inner hole; a second set of teeth (i.e., two sections defined by the gaps 8)



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disposed around the first end of the ratchet wheel; a spring mounted around said region of said ratchet wheel of relatively smaller diameter and abutting at a first end thereof said region of said ratchet wheel of relatively greater diameter, and a pressure adjusting element (4) having a threaded region adapted to threadably engage said inner hole; wherein a first side of said pressure adjusting element contacts a second end of said spring; and wherein rotation of said pressure adjusting element within said inner hole adjusts an amount of pressed force on said spring and thus on said ratchet wheel, except for the threaded region to be an interior region located in said inner hole; and a torsion tool hole at said second end of said ratchet wheel.

Regarding the threaded region, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the cap or cover (4) and the inner hole by exchanging the internal and the external threads, as the two are art recognized functional equivalents and that having an externally threaded cover cooperating with an internally threaded body, is known in the art, as further evident by cited references, e.g., Schnepel and Lee (Fig. 7), and since applicant has not disclosed that this specific arrangement solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the threads as disclosed by the reference.

Regarding the torsion tool hole at said second end of said ratchet wheel, it is noted that the tool as disclosed by Le Chot is configured for rotation through the elongated shank (6), but modifying the tool for operation by a wrench in view of Sedgley (e.g., Fig. 5), in which the second end of the ratchet body is adapted for engagement with an Allen wrench, would have been obvious to one of ordinary skill in the art at the time the invention was made, which would meet the limitations as recited.



Wherein the teeth of the body and teeth ratchet wheel each have a first sidewall and a second sidewall disposed at two sides and sloping at different angles, Le Chot, lines 74-76.

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Regarding claim 10, Chot as modified by Sedgley, appears to meet the limitation, i.e., a vertical surface relative to the other sloping surface, however, as indicate by Le Chot any desired divergence angle may be used and using divergence angle, e.g., 45 degrees relative to the central longitudinal axis, modification within the knowledge of one of ordinary skill in the art, depending on the workpiece and/or operational parameters, would meet the limitation as recited, i.e., a vertical surface relative to the other surface forming the teeth or the gaps.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Prior art made of record and not relied upon are considered pertinent to applicant's disclosure. Lee and Chang are cited to show related inventions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hadi Shakeri whose telephone number is (571) 272-4495. The examiner can normally be reached on Monday-Friday.

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The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Hadi Shakeri', with a stylized flourish extending to the right.

Hadi Shakeri
Primary Examiner
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December 1, 2004